2014 Outlook: Non-Ferrous Metals and Mining

Over supply and inventory build-up weighs down prices

Rating Report

Stable Outlook: India Ratings & Research (Ind-Ra) has assigned a Stable to Negative Outlook to the non-ferrous metals and mining sector and a Stable Outlook to the companies in the sector for FY15. The agency expects the industry players to maintain stable margins. This is partly because these companies are able to charge a physical premium, given the oligopolistic nature of the metals and mining market in India.

Moreover, if the Indian rupee continues to remain at the current INR62/USD level it will likely provide some cushion to the players; however, if currency levels were to strengthen to INR60/USD or below, it could negatively impact the margins of large players. Ind-Ra has already factored such risks into the ratings of its rated industry players.

Aluminium Prices to Remain Low: The global over supply situation is unlikely to correct in the short term. About 2 million tonnes (mt) of high-cost smelting capacity has closed down globally in the last 12 months and this is likely to continue for some time. However, 3.2mt-3.8mt of capacity, more efficiently placed on the cost curve, is likely to come up. The net incremental capacity addition being more cost efficient may prevent the prices from exceeding USD1,800/t. Potentially the global aluminium cost curve may be recalibrated marginally downward.

Aluminium Margins under Pressure: Ind-Ra expects operating profitability to remain challenged due to cost inflation and lower physical premiums in FY15, though a weak rupee could offset the decline partly. Cost inflation expectation is backed by inflation in coal and furnace oil prices. Bauxite availability is likely to be strained and could pressurise the operating margins of non-integrated players in FY15. The key sectors driving aluminium growth, such as automobiles, packaging, power and construction, are unlikely to generate robust demand in FY15.

Limited Upside to Copper Prices: Ind-Ra expects oversupply risk to magnify in the near term. Reduced demand from China as in 2013 and historically high systemic inventory levels of metal will keep metal prices down. However, an uptick in demand from the US and Europe may support the prices above the current level.

Stable Treatment Charges and Refining Charges: Indian metal and mining companies are likely to benefit from a surplus in concentrates in China and thus stable treatment and refining charges (TCRC) in FY15. Integrated players such as Hindustan Copper Ltd. are better placed currently. To the extent currency and global copper prices exhibit limited volatility, even custom smelters, who are typically non-integrated, are also expected to benefit.

Zinc Potential Upside: Integrated zinc producers will benefit as China is likely to remain a net importer of the metal along with continuous uptick in demand from the US. Supply surplus substantially reduced for the 10 months ended October 2013. Domestic producers, being net exports, will benefit from any supply-side disruptions including a fall in mining output or closure of smelting capacities resulting in a strong surge in metal prices.

Related Research

Other Outlooks
www.indiaratings.co.in/outlooks
Other Research
2014 Outlook: Steel Producers

Analysts
Mahaveer Jain S
+91 22 4000 1768
mahaveer.shankarlal@indiaratings.co.in

Sankalp Baid
+91 22 4000 1792
sankalp.baid@indiaratings.co.in

Deep N Mukherjee
+91 22 4000 1721
deep.mukherjee@indiaratings.co.in
Outlook Sensitivities

QE Tapering Uncertainty

The inventory build-up with the major metal trading exchanges touched record levels in 2013. Carry trades in metals to an extent are facilitated by low interest rates and high levels of liquidity. If either of these factors changes because of QE tapering, significant long positions in metals may be unwound, possibly causing a sharp sustained reduction in metal prices. This may negatively impact the margins of metal players.

Chinese Economic Activity

Metal prices depend substantially on Chinese economic activity. China accounts for 40%-50% of the global consumption of aluminium, copper and zinc metals. Latest leading economic indicators are not encouraging with a weak output and low order growth rates. Fitch Ratings Ltd has reduced the 2014 real GDP growth projection to 7% from sub-7% estimated last year. A further economic slowdown in China will cause a sustained long-term correction in metal prices.

Aluminium

Oversupply Situation Unlikely to Correct

Globally, the demand and supply of primary aluminium remained weighted towards a surplus in 2013 to the extent that consumption as a proportion of production was 93% in October 2013. This is lower than the corresponding number in 2010 and 2012, and marginally better than the number in 2009 and 2011.

Smelters with a high-cost structure have closed capacities to the tune of 2mt, with most of the cuts coming from China, Australia, Western Europe and to an extent USA. However, the agency estimates 3.2mt-3.8mt of capacity (more efficiently placed on the cost curve) is likely to come on-stream in the medium term. Close to three-fourths of the incremental capacity is likely to come-up in China alone, already the world’s largest producer with an estimated 24.9mt nameplate capacity.

Possible Downward Recalibration of Cost Curve

The current price of aluminium in the range of USD1,700/t to USD1,780/t is estimated to be representative of producers in the range of 75th to 85th percentile in the cost curve. The net additional capacity coming up in China is likely to have a much lower cost of production than the facilities that have been closed down. Incremental capacity available at a cheaper cost of production may potentially push prices further downwards at the current level of demand.
Historically High Inventory Levels

Metal inventory remained high at an estimated 7.5mt as at end-Nov 2013 (Producer and London Metal Exchange) keeping metal price at check. The increase in levels of stocks at exchanges with reduced producers stocks may suggest that a significant portion of the inventory may be held by financial market participants as opposed to pure producers or industrial consumers of the metal. Globally, this has caused a significant increase in the physical premium associated with the metal.

LME has announced a new warehousing policy to release inventory from warehouses and reduce pressure on consumers. The policy is proposed to be implemented by April 2014, under which warehouses with higher than 50 days inventory queues will deliver more metal than they bring in. This may bring down the physical premium. However, long positions on the metal held by financial market participants may be unwound, leading to a fall in the price of the metal around this time.

Impact of QE Tapering

Strong contango continues to suggest that there may be a glut in aluminium supply in near term. The current low interest rate regime and a surge in global liquidity have created conditions of carry trade in the metals market. As such the related metal financing structures are viable only at a low cost of funds.

In the event of sharp unwinding of the unconventional monetary policies (UMP) the cost of funding may rise, causing many financial trades to unwind, leading to an increase in supplies from exchange warehouses. In such an event, metal prices may fall to the levels seen during July 2008 and April 2009, but that is not the base case of the agency for FY15.
Domestic Scenario

Favourable Industry Structure

In India, Aluminium metal is an oligopolistic market; as such market players’ pricing ability is strong. A robust physical premium continued to prevail above USD275/t in 2013 benefiting from rupee weakening.

Muted Demand Growth

Locally, the agency expects muted demand growth in FY15. The key sectors driving aluminium growth, such as automobiles, packaging, power and construction, are unlikely to generate meaningful demand in FY15. Production and consumption declined 5% yoy and 4% yoy in ttm October 2013, respectively.

Dependence on Imported Inputs

Of the three major entities Hindalco Industries Ltd. (Hindalco) and National Aluminium Company Ltd. (Nalco) are fully integrated with bauxite/ alumina linkages. However Sesa Sterlite Ltd. (Sterlite) largely depends on the outside purchase of inputs and is thus subject to the price volatility of key raw materials. Alumina prices continue to increase at higher pace than the metal prices underpinned by Indonesia’s export ban and rupee weakening.

Incessant cost inflation

Although realisations improved in FY13, the operating profitability of key players was muted due to an increase in the cost of mining and smelting. All of these three players have captive power plants, however rising inputs and fuel costs have negated the benefit of increased realisation. Fitch Ratings (Ind-Ra’s parent company) has muted coal price expectations globally in 2014. Weakness in international coal prices may provide some comfort to the sector in FY15.

Week Rupee to Benefit

Ind-Ra expects FY15 realisations and operating profits to remain stable at the current levels. To the extent the rupee remains at the current levels (or depreciates), it will provide a cushion to the margin of metal players. However, rupee appreciation above INR60/USD may affect margins negatively.
Copper

Supply Surplus Continues
Ind-Ra expects growth in copper supply to continue to surpass demand growth in FY15. Also, a surplus in copper concentrate would be more pronounced than the refined metal.

According to the International copper study group, expansions and project start-ups during 2013 and 2014 were expected to increase world mine production to around 18.6mt in 2014 from 16.7mt in 2012. Mine production operating rates improved to 83% in the nine months ended December 2013 from 80% in 9MFY13 while refining operating rate improving only marginally to 78.7% from 78.2%. Ind-Ra expects more mining capacity to become available than the refining capacity leading to a higher surplus in the ore/concentrate market than in the refined metal market.

Demand Prospects Mixed
With better prospects for global economy in 2014, the study group expects the world production and usage to grow 5.5% yoy and 4.5% yoy, respectively. While the agency expects demand growth from the US to pick up, it is unsure of China’s high growth rates. In 2013, consumption growth in North America picked up traction and China’s apparent usage declined. It is noteworthy that Chinese metal demand growth remained strong at 7% yoy in ttm October 2013 compared with 15% yoy in 2012.
Corporates

2014 Outlook: Non-Ferrous Metals and Mining
March 2014

Figure 1

High Systemic Inventory
Copper metal inventories, both at producers and exchange, reached an eight-year high at end-1Q13 and declined to an extent by end-2013. Global consumption is likely to recover in 2014. However, the liquidation of built-up copper inventories, scheduled capacity expansion and possible moderation in Chinese consumption would weigh on metal prices in FY15.

Figure 12

Signals from Financial Markets
Copper has entered into a backwardation since beginning of December 2013. In theory, this indicates a scarcity of the commodity. Empirically, a backwardation in copper markets in the past has generally not been followed by a sharp increase in the metal price. However, if the current levels of global interest rate and liquidity persist, there may be limited upside to the price of copper.
Domestic Scenario

Muted Demand Growth

Ind-Ra expects muted domestic demand growth for the metal in FY15. The key sectors driving demand growth, such as electricals, power and construction, are unlikely to generate meaningful demand in FY15. Domestic production and usage declined by an estimated 12% yoy and 1% yoy, respectively, for ttm October 2013. Production disruption at Sesa Sterlite’s Tuticorn smelting unit during 1QFY13 also contributed to the production decline.

TCRC Margins Supported by Surplus Concentrates

The expected surplus in global copper concentrates along with additional mining capacity is favourable for TCRC. Figure below shows the agency’s observation that copper ore prices softened in 2H13 when rupee weakened substantially. India is among the top 10 counties by smelting capacity. Smelters generally pass through increases in copper prices and earn TCRC margin. India depends on imported concentrates to a large extent and is a net exporter of the primary metal.

Integrated Producer to Sustain Margins

A weak rupee is favourable for integrated copper miners but not so much for custom smelters who depend on imported ore/concentrates. Thus, integrated producers are in a better position to sustain operating margins in the event of volatility in input prices and/or forex rates. Hindustan Copper is the only integrated producer in India and Sesa Sterlite and Hindalco predominantly are custom smelters.

Cost Pressure

In FY15, Ind-Ra expects cost inflation to continue to offset the benefit of a weak rupee and favourable TCRC margins. Hence, operating profitability is likely to remain stable. Low prices of key by-products, such as sulphuric acid and precious metals, have also offset the benefit of currency weakness.
Zinc

Price Upside Restricted

Ind-Ra expects zinc prices to remain stable in FY15. Although global demand of the metal is likely to recover from the FY14 levels, the supply surplus in the China concentrate market, metal inventory build-up, with producers and exchange alike and risk of China growth moderation will continue to restrict the upside for the price.

Global demand growth turned positive in the 11 months ended November 2013, contributed mainly by key markets including the USA and China. This has resulted in better balance in global metal demand supply situation. However, in the context of limited capacity expansion in the near term, closure or disruption of any major project could trigger a deficit in supplies, pushing metal prices up.

Chinese mine production is likely to have remained well above consumption in 2013, creating a surplus. This could keep regional metal prices in check in 2014.
The global inventory build-up in metal exceeded 2mt at end-September 2013 from around 1.85mt at end-September 2012 (source: International Lead and Zinc Study Group). The inventory is an estimated 17% of the global annual consumption in 2013.

Figure 20

**Zinc Inventory & Price Movement**

Inventory Levels Recede From Peak of Jan 13

![Graph showing Zinc Inventory & Price Movement](image)

Source: Bloomberg/LME

Zinc futures market moved from being predominantly in contango to backwardation by end-2013 indicating supply tightness. The agency expects a decline in mining supplies in the medium term with certain large and low-cost mines scheduled to close. This would lead the inventory levels to moderate from the current levels and support potential upward movement in metal price.

Figure 21

**Spread Between Three Month Futures and Spot**

Backwardation May Mean Supply Tightness

![Graph showing Spread Between Three Month Futures and Spot](image)

Source: Bloomberg, LME

**Domestic Scenario**

Ind-Ra expects domestic realisation and operating profitability in FY15 to remain stable, despite a likely increase in demand, due to global high inventory levels and pressure on metal prices.

**Strong Industry Structure**

India’s zinc industry is marked by a duopoly with Hindustan Zinc Ltd (HZL) and Binani Zinc Ltd. being the only two meaningful metal producers. Hindustan Zinc is among the top three integrated players globally (in terms of metal capacity) with cash cost in the lower quadrant.

**Muted Demand Growth**

Ind-Ra expects a moderate uptick in domestic metal demand on back of modest growth in steel production in FY15. The agency has a negative outlook for the steel sector in FY15. Galvanisation of steel is the key end-industry, consuming an estimated three-fourths of the domestic production. The agency expects the domestic supply situation to remain comfortable in the medium term. HZL plans to increase its mining capacity to 1mtpa (metal) in FY14-FY15. The company’s Zinc sales grew 27% yoy in ttm December 2013.
Cost of Production Offsets Rupee Benefit

HZL’s average realisations increased by 13% yoy in 2013 on back of a weakening rupee. However, operating profitability improved only marginally due to higher cost of production and lower by-product realisation.

Figure 23

*India Zinc Ore Production and Price Trends*

Ore Prices Trends Up

Source: Bloomberg 2004-2005 =100

Figure 24

*Zinc Price Trend-LME & India*

Weak Rupee Split Domestic Prices from LME

Source: Bloomberg, LME, Ind-Ra estimates
Corporates

2013 Review

Sesa Sterlite Ltd.

Sesa Sterlite, erstwhile Sesa Goa Limited, is a subsidiary of Vedanta Resource Plc (Fitch Ratings Issuer Default Rating ‘BB+’/Stable). As part of a reorganisation completed in August 2013, Sesa Sterlite was formed by merging Sterlite Industries India Limited, Madras Aluminium Company Limited, Vedanta Aluminium Limited and Sterlite Energy Limited with Sesa Goa Limited.

Ind-Ra has assigned Sesa Sterlite a Long-Term Issuer Rating of ‘IND AA+'. The Outlook is Stable. The ratings reflect its strong and diversified business profile with significant presence in multiple business segments including zinc, oil & gas, copper, aluminium, iron ore and power. Sesa Sterlite’s most business operations entail low cost, especially in oil & gas and integrated Indian zinc operations where the company’s cost of production lies in the first cost quartile. The cost of production in the company’s other businesses also, especially aluminium, continues to be in the lower half of the cost curve despite lack of raw material linkages.

Ind-Ra expects Sesa Sterlite’s consolidated revenue to decline in FY14 due to softening of commodity prices, although the impact would be partially offset by a depreciated rupee. The decline will also be due to the temporary suspension of Indian copper operation. EBITDA is also expected to fall in FY14 despite higher production from the company’s Rajasthan oil fields due to lower profitability from the oil & gas segment (higher exploration cost) and higher profit petroleum paid to the government. Profitability will also be impacted from lower copper production in India, although the impact will to some extent be offset by higher profits from Zinc India due to higher volumes.

Sesa Sterlite’s net leverage is likely to increase in FY14 due to the lower profitability and proposed buyback of Cairn’s shares. However, the increase will remain within the negative rating guidelines.

Century Aluminium Manufacturing Co.

Century Aluminium Manufacturing Co (CAMCO) is a closely held company. It manufactures aluminium alloys ingots for the domestic automobile engineering industry and de-oxidants for the steel industry. CAMCO’s manufacturing facilities are located at Khardah in West Bengal and Faridabad and Hodal in Haryana.

Ind-Ra downgraded CAMCO’s Long-Term Issuer Rating to IND BB in 2013 from INDBB+. The Outlook Is Stable. The downgrade reflects the material deterioration in CAMCO’s credit metrics and financial profile in FY12 (year end March). Margin declined because of high input costs which it could not pass through to its customers and debt increased due to debt-funded capex and increased working capital requirements.
The rating is supported by CAMCO’s established track record of over 30 years in aluminium recycling coupled with its long-standing relationships with a reputed clientele. The rating is further underpinned by CAMCO’s presence in National Capital Region which gives it proximity to various original equipment manufacturers.
## Appendix

### Figure 26

**Issuer Ratings**

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Rating/Outlook/RW (Current)</th>
<th>Rating/Outlook/RW (End-2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sesa Sterlite Ltd.</td>
<td>IND AA+/Stable</td>
<td>IND AA+/Stable*</td>
</tr>
<tr>
<td>Century Aluminium Manufacturing Co. Limited</td>
<td>IND BB/Stable</td>
<td>IND BB/Stable</td>
</tr>
</tbody>
</table>

Source: Ind-Ra, * Sterlite Industries India Ltd
The ratings above were solicited by, or on behalf of, the issuer, and therefore, India Ratings has been compensated for the provision of the ratings.

ALL CREDIT RATINGS ASSIGNED BY INDIA RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: HTTP://WWW.INDIARATINGS.CO.IN/UNDERSTANDINGCREDITRATINGS.JSP IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEBSITE WWW.INDIARATINGS.CO.IN. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. INDIA RATINGS' CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE.

Copyright © 2014 by Fitch, Inc., Fitch Ratings Ltd. and its subsidiaries. One State Street Plaza, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings, India Ratings & Research (India Ratings) relies on factual information it receives from issuers and underwriters and from other sources. India Ratings believes to be credible. India Ratings conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of India Ratings' factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of India Ratings' ratings should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information India Ratings relies on in connection with a rating will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to India Ratings and to the market in offering documents and other reports. In issuing its ratings India Ratings must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings can be affected by future events or conditions that were not anticipated at the time a rating was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind. A rating provided by India Ratings is an opinion as to the creditworthiness of a security. This opinion is based on established criteria and methodologies that India Ratings is continuously evaluating and updating. Therefore, ratings are the collective work product of India Ratings and no individual, or group of individuals, is solely responsible for a rating. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. India Ratings is not engaged in the offer or sale of any security. All India Ratings reports have shared authorship. Individuals identified in a India ratings report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a rating by India Ratings is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of India Ratings. India Ratings does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. India Ratings receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating services. The assignment, publication, or dissemination of a rating by India Ratings shall not constitute a consent by India Ratings to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction including India. Due to the relative efficiency of electronic publishing and distribution, India Ratings research may be available to electronic subscribers up to three days earlier than to print subscribers.